

ABSTRACT

*Awareness to environmental issues has raised it the past two decades. Waste elements and side products from the Construction Industry are one of the major topics that concern not only environment experts but also subject directly or indirectly connected to the Construction Industry. **PT. Inti General Yaja Steel (I.G.Y.S)**, Semarang, a forge steel industry that produces steel elements from used steel products has a by product in the form of solid waste called slag. This slag is produced from the steel dissociation process and can reach to a quantity of 10-15 metric - ton daily. This research work is aimed to investigate the possibility of using slag as an alternate to fine and coarse aggregates in concrete, and therefore will be no longer a problem from the environmental point of view. In this research three variation of slag content will be evaluated, which are: 0%, 40%, and 80% used as fine and coarse aggregates. Data that will be conducted in the analysis are the properties of concrete such as; compressive strength, tensile strength, specific gravity and workability.*

Keyword : slag, concrete, technical aspect.